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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/670,393	09/26/2003	Tateki Jozaki	000560-00125	2725

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BLANK ROME LLP
600 NEW HAMPSHIRE AVENUE, N.W.
WASHINGTON, DC 20037

EXAMINER

LE, DAVID D

ART UNIT PAPER NUMBER

3681

DATE MAILED: 06/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/670,393

Applicant(s)

JOZAKI ET AL.

Examiner

David D. Le

Art Unit

3681

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 April 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 April 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. This is the second Office action on the merits of Application No. 10/670,393, filed on 26 September 2003. Claims 1-14 are pending.

Documents

2. The following documents have been received and filed as part of the patent application:
 - Information Disclosure Statement, received on 12/23/03
 - Drawings, received on 01/07/04
 - Drawing, received on 04/08/05

Drawings

3. The drawings were received on 08 April 2005. These drawings are approved.

Specification

4. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required:
5. Claims 2-6 recite the limitation “a step-out determination criterion.” There is insufficient antecedent basis for this claimed limitation in the present specification.
6. Claims 7 and 9-14 recite the limitation “a step-out criterion.” There is insufficient antecedent basis for this claimed limitation in the present specification.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. **Claims 1-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.**

Claims 1-7:

- Claim 1, line 14 recites the limitation “a step-out”. It is unclear whether this “a step-out” is different from the one, which is first recited on line 12 of the claim.
- Claim 2, line 3 recites the limitation “a step-out”. It is unclear whether this “a step-out” is different from the one, which is first recited on line 12 of claim 1.
- Claim 3, line 3 recites the limitation “a step-out”. It is unclear whether this “a step-out” is different from the one, which is first recited on line 12 of claim 1.
- Claim 4, line 3 recites the limitation “a step-out”. It is unclear whether this “a step-out” is different from the one, which is first recited on line 12 of claim 1.
- Claim 4, line 4 recites the limitation “acceleration or deceleration is a predetermined value or less”. It is unclear whether applicant is referring to the predetermined vehicle speed (Vsp) value or the predetermined speed change ratio.
- Claim 5, line 3 recites the limitation “a step-out”. It is unclear whether this “a step-out” is different from the one, which is first recited on line 12 of claim 1.
- Claim 6, line 3 recites the limitation “a step-out”. It is unclear whether this “a step-out” is different from the one, which is first recited on line 12 of claim 1.

Claims 8-14:

- Claim 8, line 18 recites the limitation "said correction". There is insufficient antecedent basis for this limitation in the claim.
- Claim 9, lines 2-3 recite the limitation "a step-out". It is unclear whether this "a step-out" is different from the one, which is first recited on line 13 of claim 8.
- Claim 10, lines 2-3 recite the limitation "a step-out". It is unclear whether this "a step-out" is different from the one, which is first recited on line 13 of claim 8.
- Claim 11, lines 2-3 recite the limitation "a step-out". It is unclear whether this "a step-out" is different from the one, which is first recited on line 13 of claim 8.
- Claim 11, line 3 recites the limitation "acceleration or deceleration is below a predetermined value". It is unclear whether applicant is referring to the predetermined vehicle speed (Vsp) value or the predetermined speed change ratio. For the purpose of applying prior art rejection, Examiner interprets this limitation as --acceleration or deceleration is below a predetermined speed change ratio value--.
- Claim 12, lines 2-3 recite the limitation "a step-out". It is unclear whether this "a step-out" is different from the one, which is first recited on line 13 of claim 8.
- Claim 13, lines 2-3 recite the limitation "a step-out". It is unclear whether this "a step-out" is different from the one, which is first recited on line 13 of claim 8.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. **Claims 1-9 and 12-14 are rejected under 35 U.S.C. 102(b) as being anticipated by U.**

S. Patent No. 5,788,599 to Adachi et al.

Claims 1-9 and 12-14:

Adachi (i.e., Figs. 1-10; column 3, line 29 – column 9, line 30) discloses a continuously variable transmission system comprising:

- A stepper motor (113);
- An input rotation detection means (i.e., the engine speed signal S3 or the turbine rotation speed signal S7);
- An output rotation detection means (i.e., the vehicle speed sensor S8);
- A selector position signal (S6);
- A braking signal (S5);
- An electronic control unit (101);
- A hydraulic control unit (102);
- A speed change ratio control unit (106);
- An actual speed change ratio calculation means (being the target ratio computing unit (410), which serves the functions of the claimed actual speed change ratio calculation means (i.e., column 6, lines 30-41));

- A step-out determination means (being the rotation ratio command unit (420), which serves the functions of the claimed step-out determination means (i.e., column 6, lines 42-47));
- A step-out correction means (being the step motor angle position adjustment unit (450), which serves the functions of the claimed step-out correction means (i.e., column 6, lines 47-49));
- A drive means (i.e., column 6, lines 47-49, being the drive signal S0);
- Wherein the step-out determination means compares a step position ASTP (i_{pT}) of the step motor stored by the speed change ratio control unit and a step position BSTP (i_{pR}) of the step motor corresponding to the calculated actual speed change ratio, and if $ASTP \neq BSTP$ is satisfied determines that a step-out has occurred on said step motor (i.e., Fig. 4, steps S101-S105, column 6, line 50 – column 7, line 3);
- Wherein the step-out correction means corrects the step position ASTP so as to reduce a difference between ASTP and BSTP (i.e., Fig. 4, step S106; column 7, lines 3-38);
- Wherein the drive means uses the corrected ASTP (Si_p) to drive the step motor (i.e. column 7, line 39 – column 9, line 2);
- Wherein the step-out determination means inherently determines a step-out of the step motor when a step-out determination condition that hydraulic pressure is in a state capable of realizing a speed change ratio corresponding to a step position of the step motor stored in the speed change ratio control unit;

- Wherein the step-out determination means determined a step-out of the step motor when a step-out determination condition that an alteration of the speed change ratio is a predetermined value (i.e., column 6, lines 53-63);
- Wherein the step-out determination means determines a step-out of the step motor when a step-out determination condition that acceleration or deceleration is a predetermined value (i.e., column 6, lines 53-63);
- Wherein the step-out determination means inherently determines a step-out of the step motor when a step-out determination condition that braking is not being operated; and
- Wherein the step-out determination means inherently determines a step-out of the step motor when a step-out determination condition that a lever is not being operated by a driver.

Allowable Subject Matter

11. Claims 10 and 11 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Response to Arguments

12. Applicant's arguments filed on 08 April 2005, with respect to claims 1-9 and 12-14, have been fully considered but they are not persuasive.

Applicant argues that, in Adachi'599, the control unit does not carry out the feedback control when the memorized step position of the step motor enters the "exceeded allowable step range".

Examiner recognizes the differences between the applied reference and the present claimed invention. However, the recitations of the above mentioned claims do not specifically reflect this argument.

Accordingly, as set forth in paragraph 10, Adachi'599 meets the claimed limitations.

Conclusion

13. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David D. Le whose telephone number is 703-305-3690. The examiner can normally be reached on Mon-Fri (0700-1530).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles A Marmor can be reached on 703-308-0830. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


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CHARLES A. MARMOR
SUPERVISORY PATENT EXAMINER
ART UNIT 3681